English

SR-904

STEREO RECEIVER

INSTRUCTION MANUAL

Congratulations!
HITACHI Hi-Fi products are the proud result of HITACHI engineering research and development and over 50 years of experience in electronics. Laboratories and major testing facilities are maintained in Tokyo and Toyokawa, Japan.
In choosing this fine HITACHI Hi-Fi product you have demonstrated an acute awareness of "getting the most for your money". With HITACHI products this is not an idle boast.

KEY TO ILLUSTRATIONS

① POWER switch
② PHONES jack
③ PROTECTION indicator
④ SPEAKERS switches (A,B)
⑤ BASS control
⑥ MIDRANGE control
⑦ TREBLE control
⑧ LOW FILTER switch
⑨ HIGH FILTER switch
⑩ VOLUME control
⑪ BALANCE control
⑫ TAPE COPY switch
⑬ TAPE MONITOR switch
⑭ FUNCTION switch
⑮ MODE switch
⑯ LOUDNESS switch
⑰ ADAPTOR switch
⑱ Tuning knob
⑲ TUNING meter
⑳ SIGNAL meter
㉑ Dial pointer
㉒ Program source indicators
㉓ FM AUTO LOCK indicator
㉔ FM STEREO indicator
㉕ Power meters
㉖ PHONO input terminals
㉗ AUX input terminals
㉘ TAPE-1 PLAY terminals
㉙ TAPE-1 REC OUT terminals
㉚ TAPE-1 DIN REC/PLAY socket
㉛ TAPE-2 PLAY terminals
㉜ TAPE-2 REC OUT terminals
㉝ ADAPTOR IN terminals
㉞ ADAPTOR OUT terminals
㉟ SPEAKERS terminals
㊱ AC line cord
㊲ FUSE
㊳ AM bar antenna
㊴ AM ANTENNA terminal
㊵ FM ANTENNA terminals
㊶ FM ANTENNA socket (75 ohms)
㊷ Ground terminal (GND)

SAFEGUARD
Electrical energy can perform many useful functions. This unit has been engineered and manufactured to assure your personal safety. Improper use can result in potential electrical shock or fire hazards. In order not to defeat the safeguards, observe the following instructions for its installation, use and servicing.

WARNING: TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

INSTALLATION

Please choose a place that satisfies the following conditions when installing the SR-904.

1. A place free from direct sunlight and heat from a stove, etc.
2. Since the SR-904 incorporates a large power output amplifier, choose a well-ventilated, moisture-free place.
3. Install on a stable and vibration-free surface.

IMPORTANT FOR U.K.:

WARNING: This apparatus must be earthed.

The wires in this mains lead are coloured in accordance with the following code:

Green and Yellow	:	EARTH
Blue	:	NEUTRAL
Brown	:	LIVE

As the colours of the wires in the mains lead of this apparatus may not correspond with the coloured markings identifying the terminals in your plug proceed as follows. The wire which is coloured GREEN and YELLOW must be connected to the terminal in the plug which is marked by the letter E or by the safety earth symbol ⏚ or coloured GREEN or GREEN and YELLOW.

The wire which is coloured BLUE must be connected to the terminal which is marked with the letter N or coloured BLACK.

The wire which is coloured BROWN must be connected to the terminal which is marked with the letter L or coloured RED.

IMPORTANT NOTICES

(1) When measuring the power output or listening to program sources with a 4 ohms load impedance, do not drive the Model SR-904 at full power for a long period of time.

(2) When using the model with a continuous output of over 150 watts, the protection indicator will light up and the sound will sometimes be interrupted. This does not indicate a breakdown. In such cases, turn off the power, turn down the volume level and then wait about 30 seconds before switching the power back on again.

NOTE:

Power meter ㉕ indication

When the impedance of speakers is 8 ohms, the scales of the meters express the power output in Watts. When the impedance of the speakers is only 4 ohms, the actual output is double the value indicated on the meters. For example, if the pointers point to 50 watts on the scales, then the actual output is 100 watts.

(3) The Model SR-904 has two types of electronic protection circuits; a shut-down circuit and current limiter circuit. If the shut-down circuit is actuated, the output of the amplifier is cut off.

When only the current limiter circuit is actuated, the operation of the power amplifier is not shut down.

(4) A tape deck being used may be susceptible to induction from the receiver, although this depends on the type of tape deck, and there may be a hum sound. In such cases, install the tape deck in a location where it will not be susceptible to the induction. (For instance, place the tape-deck on the right of the receiver when viewed from the front).

Do not place the tape deck on top nor on the left of the receiver since this will impair the receiver's performance.

FEATURES

Tuner Section

1. Dual Gate MOS FET for High Quality FM Tuner

The dual gate MOS FET in the front-end and the 4-gang variable capacitor offer excellent FM sensitivity (1.6 μV), intermodulation characteristics, a high S/N ratio and spurious rejection.

2. Auto-Lock Circuit

To stabilize tuning, an Auto-Lock circuit is provided. This circuit engages immediately when you release the tuning knob after precise tuning. Just by touching the tuning knob, you can disengage the Auto-Lock circuit (the Auto-Lock indicator goes off) for fine tuning.

Releasing the tuning knob re-engages the Auto Lock circuit which automatically stabilizes the tuning circuit and locks onto the station selected for a high S/N ratio and low distortion.

3. **High-Selectivity and Low-Distortion IF Amplifier Using ICs, and 3 Ceramic Filters**
A 4-stage differential amplifier is employed. The extensive use of ICs, together with 3 cermic filter elements having good phase characteristics in the FM-IF amplifier greatly improves the limiter and selectivity characteristics.
4. **Quadrature Detection**
Quadrature detection with the extensive use of ICs yields a wide band coverage and low distortion.
5. **Phase-Locked Loop IC for FM/MPX Circuit**
A PLL-IC, which was developed by HITACHI, is used for the FM/MPX circuit to produce a high separation and low distortion. Also, high reliability is achieved with respect to temperature and aging.
6. **Ceramic Filter, ICs in AM Tuner**
A ceramic filter is employed in the AM tuner to obtain high selectivity and AGC characteristics. The extensive use of ICs enables stable reception to be achieved.
7. **Two Large Easy-to-read meters and a Large-sized Fly-wheel Tuning Knob**
Two easy-to-read meters are used for signal tuning. The dial mechanism employs a large-sized flywheel with a high moment of inertia for easy operation.

Audio Section

1. **Newly Developed High-Efficiency High Power Audio Amplifier (Dynaharmony Amplifier)**
This amplifier delivers a higher dynamic power output (150 watts per channel, 8 ohms) without distortion than conventional Class B amplifiers.
The relative low power consumption of Dynaharmony operation minimizes the heat sink of power transistors, and slims down the weight and size of the whole amplifier. This amplifier has 2 pairs of DC power supplies. Under this method, Dynaharmony operation can deliver dynamic power which is more than twice the value of the maximum rated power output or more.
2. **Electronic Protection Circuits**
HITACHI's original, highly reliable electronic protection circuits protect the speakers and power transistors. When a fault occurs, the circuit is switched off and this is then displayed on the front panel by the light-emitting diode.
3. **Separate Power Meters (L and R channels)**
To see the actual power output while you are listening, two new attractive power meters are provided.
4. **Tape Dubbing**
Tape dubbing can be done either from TAPE-1 to TAPE-2 or vice versa. In addition, a source monitor circuit, with which tape dubbing is possible while listening to an FM broadcast or a record, is provided.
5. **Midrange Tone Control**
This amplifier has not only BASS and TREBLE tone controls but also a MIDRANGE tone control.
By setting these three controls, you can choose the preferred frequency characteristics of the amplifier. The controls all have 11 click stops. This feature offers good feel which makes for easier setting and resetting.
6. **Low Filter and High Filter**
The low filter cuts out the low frequency noise such as the turntable rumble and the high filter cuts out high frequency noise such as the scratch noise of records while listening to FM broadcasts.
7. **Two Speaker Systems**
Two different types of speaker systems can be connected to the unit and they can be selected simply by flipping a switch.

CONNECTING

1. CONNECTION OF SPEAKERS

It is possible to connect two pairs of speaker systems to the SR-904. You can use the two pairs of speakers simultaneously and enjoy music in different rooms using the SPEAKERS switches ④.

NOTES:

(1) As illustrated in the figure, on the cover page, the right side terminals are for the left channel, and left side channel are for right channel. The red terminals are positive (+), and the black terminals are negative (−). Make sure the polarities of the terminals in this receiver correspond to those of the speakers terminals ㉟.

(2) When 4-ohm speakers are connected to both A and B, and the SPEAKERS switches A and B ④ are both depressed, the combined impedance of the speakers is only 2 ohms and so the PROTECTION indicator ③ will come on. Avoid using this arrangement. Be sure to connect speakers of more than 8 ohms when two sets of speakers are to be operated simultaneously.

(3) Turn the SPEAKERS switches ④ off when only headphones are being used.

2. CONNECTION OF TURNTABLE

Connect the turntable as shown in the figure on the cover page. It is different depending on the kind of cartridge used.

(1) Moving Magnet Cartridges
Connect the output leads of the turntable to the PHONO input terminals ㉖ .

(2) Moving Coil Cartridges
Connect to the PHONO input terminals ㉖ via a matching transformer or pre-amplifier.

(3) Ceramic or Crystal Cartridges
Connect to the AUX input terminals ㉗ .

NOTE:
Be sure to connect a grounding wire from the turntable to the ground terminal ㊷ of the SR-904.

3. CONNECTION OF TAPE DECKS

Both pin-jack connections and DIN record/playback single cord connection (TAPE-1) are available. Further, since two sets of record and playback terminals are provided, two tape deck connections are available at the same time, and dubbing or duplicate recordings from one tape deck to the other can be done.

(1) Connection with DIN record/playback connector (TAPE-1 only)
Insert a DIN record/playback connector into the TPAE-1 DIN REC/PLAY socket ㉚ .
See the figure on the cover page.

(2) Connections with pin-plugs (TAPE-1, 2)
Connect the record terminals (LINE IN) of the tape deck to the TAPE-1 REC OUT terminals ㉙ and the output terminals (LINE OUT) of the tape deck to the TAPE-1 PLAY terminals ㉘ of the SR-904. You can connect another tape deck in the same way mentioned above.
See the figure on the cover page.

NOTE:
If the TAPE-1 DIN REC/PLAY socket ㉚ is used for recording and playing back, it is not necessary to use pin-jacks, and vice versa.

4. USE OF THE AUX INPUT TERMINALS ㉗

These terminals are a set of spare input jacks. They can be connected to cartridge tape players, television sound multiplex tuners, or other forms of signal output.
The upper of the two terminals is the L (left) channel, and the lower is the R (right) channel.

5. USE OF THE ADAPTOR TERMINALS

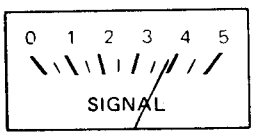
These terminals ㉝ , ㉞ are a set of adaptor input-output jacks. They can be connected to a tape deck and Dolby adaptor. Connect the input terminals (LINE IN) of the adaptor to the ADAPTOR OUT terminals ㉞ and the output terminals (LINE OUT) of the adaptor to the ADAPTOR IN terminals ㉝ of the SR-904.

RECEIVING BROADCASTS

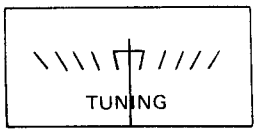
1. RECEIVING FM BROADCASTS

(1) Set the FUNCTION switch ⑭ to FM. When receiving FM broadcasts, unpleasant inter-station noise may be heard when tuning; this may damage the speakers.
This inter-station noise can be cut by the following procedure:
FUNCTION switch ⑭ set to FM MUTE/AUTO LOCK.

(2) When on station by turning the Tuning knob ⑱ , the SIGNAL meter ⑳ should make its biggest deviation to the right and the TUNING meter ⑲ pointer should be central for precise tuning. See Fig. 1.



SIGNAL METER



TUNING METER
(for FM reception only)

Fig. 1

(3) Set the MODE switch ⑮ to STEREO (⫾). When you are receiving a stereo broadcast, the FM STEREO indicator ㉔ will illuminate.

(4) Adjust the balance of left/right sound with the BALANCE control ⑪ .

CAUTION:
If the input signal from the antenna is weak (as in an area where the signal strength is low), and if the FUNCTION switch ⑭ is set at FM MUTE/AUTO LOCK, the broadcast may not be picked up. In this case, set the FUNCTION switch ⑭ to FM.

* FM ANTENNA CONNECTION

Accessory T-type FM Antenna
If the broadcasting station is near or the radio field strength is high, this antenna is sufficient. Connect the lead of the antenna to the antenna terminal on the rear of the receiver, expand the antenna into a "T"-shape, find the point of highest sensitivity and fix the antenna there.

Outdoor FM Antenna
When using this tuner far from the broadcasting

station or behind a ferroconcrete building where the radio field strength is low, install an outdoors FM antenna. The height and direction of the outdoor antenna should be adjusted for optimum reception.
When the distance between the antenna and this tuner is over 30 meters (around 100 feet), or in areas subject to heavy traffic or close to a high-tension power line, noise may disturb listening even when the FM exclusive antenna is sued.
However, since the coaxial cable is a "75 ohm unbalanced" type, install a matching transformer between the antenna and the coaxial cable to prevent wave loss. When this conversion transformer is incorporated in the antenna, a normal 75 ohm coaxial cable can be used.

2. RECEIVING AM BROADCASTS

(1) Set the FUNCTION switch ⑭ to AM.
(2) The MODE switch ⑮ may be either in the MONO or STEREO position.
(3) Find the desired station with the Tuning knob ⑱. In this case, the point where the pointer of the SIGNAL meter ⑳ shows maximum deviation is the correct tuning point.

Outdoor AM Antenna

When using this set far from the broadcasting station or at a place where the radio reception is adversely affected by ferroconcrete buildings or some other structure, install an outdoor antenna. Connect vinyl wire to the AM ANTENNA terminal ㊴ on the rear of this set, and install the antenna a short distance from the building. Fix the antenna where the best radio reception can be obtained. It is desirable for safety's sake to equip the outdoor antenna with an arrester switch.

3. USING THE ADAPTOR TERMINALS

Dolby Recording

(1) As shown in Fig. 2 connect the ADAPTOR OUT terminals ㉞ to the tape deck recording input terminals (LINE INPUT).
(2) Select the program source of your choice with the FUNCTION switch ⑭.

NOTE:
If you wish to monitor the sound being recorded with the Dolby NR adaptor, turn the ADAPTOR switch ⑰ ON.

Dolby Playback

(1) Connect the tape deck playback output terminals (LINE OUTPUT) to the ADAPTOR IN terminals ㉝.
(2) Turn the ADAPTOR switch ⑰ ON, and playback your Dolby system recordings.

NOTE:
For detailed instructions on connections etc., please see the instruction manual provided with your Dolby NR adaptor.

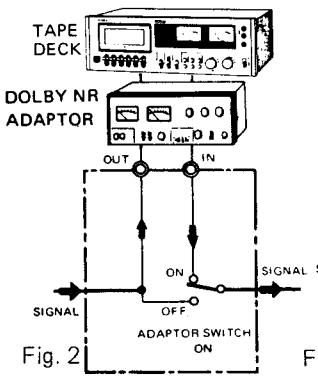


Fig. 2

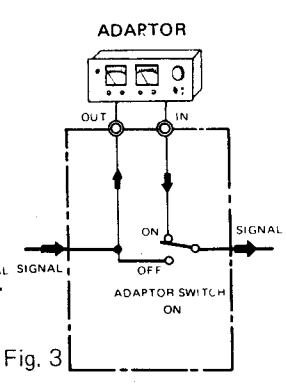


Fig. 3

4. OTHER ADAPTORS CURRENTLY AVAILABLE

The provision of these additional and convenient adaptor terminals to the normal tape REC OUT/PLAY terminals, enables other sophisticated adaptor units (e.g. a graphic equalizer, dynamic processor) to be connected without impairing the full tape monitoring and duplicating facility. When using an adaptor, the program source can be taken from the FUNCTION switch ⑭ or the tape deck output terminals. Fig. 3 illustrates an Adaptor connected to the ADAPTOR terminals.

5. USING TAPE DECKS

Playback

(1) According to the TAPE PLAY (1, 2) ㉘, ㉛ or ADAPTOR IN terminals ㉝ to which the tape deck is connected, the TAPE MONITOR switch ⑬ should be set to TAPE-1 or TAPE-2, or the ADAPTOR switch ⑰ should be set to ON (⊓) (see Fig. 4).
(2) Operate the tape deck controls for playback.
(3) Adjust the VOLUME ⑩, BASS ⑤, MID-RANGE ⑥ and TREBLE ⑦ controls for the listening level and tone quality of your preference.

NOTE:
Setting the TAPE MONITOR switch ⑬ to TAPE-1 or TAPE-2 enables tape playback whatever the setting of the FUNCTION switch ⑭.

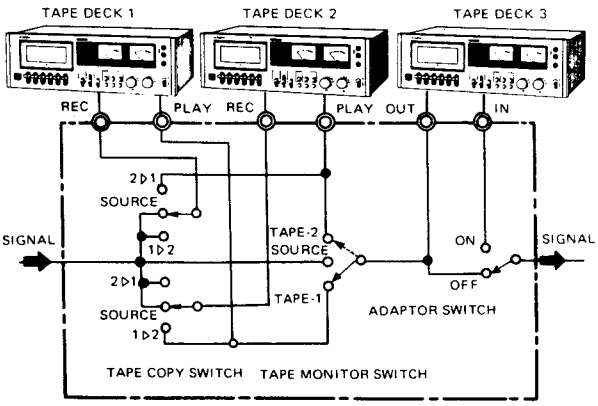


Fig. 4

Recording

As shown in Fig. 5, the receiver's TAPE REC OUT (1, 2) ㉙, ㉜ and ADAPTOR OUT terminals ㉞ carry a certain fixed level output from the source selected by the FUNCTION switch ⑭, which once the tape deck is connected to the appropriate jacks, enables the selected source to be recorded.
The operation is as follows:

1. Set the FUNCTION switch ⑭ for the source to be recorded.
2. Play the selected program source.
3. Adjust the recording level by means of the controls on the tape deck and commence recording.

NOTE:
The receiver's VOLUME ⑩, BASS ⑤, MIDRANGE ⑥ and TREBLE ⑦ controls have no effect on the recorded sound during recording.

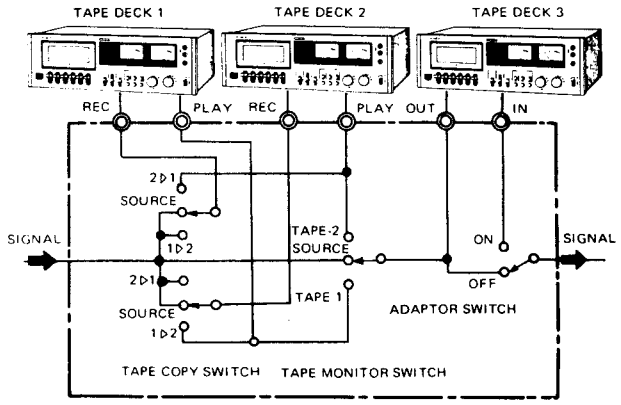


Fig. 5

Tape Monitor

While a recording is being made on a three-head deck, the recorded sound can be monitored through the speaker systems if the TAPE MONITOR switch ⑬ is turned to TAPE-1 or TAPE-2. In this case both recording and playback connections must be made.

DUBBING (TAPE COPY)

By using two tape decks, a recording of, say, a complete FM broadcast can be made, and then those items which you want for your permanent "tape library" can be selected and re-recorded onto another tape.

(1) Connect the two tape decks as shown in Fig. 6.
(2) Set the TAPE COPY switch ⑫ to 1 ▷ 2 or 2 ▷ 1 position.
(3) Select one of the tape decks (1 or 2) to playback the pre-recorded tape, and use the other tape deck to make the copy recording.
(4) When recording with tape deck 1, the TAPE MONITOR switch ⑬ should be set to TAPE-1 to monitor the sound being recorded. And when recording with deck 2, the TAPE MONITOR switch ⑬ should be set to TAPE-2 for monitoring (refer again to Fig. 6).
(5) Set the TAPE MONITOR switch ⑬ to SOURCE. Tape dubbing is possible while listening to the source sound of your preference.

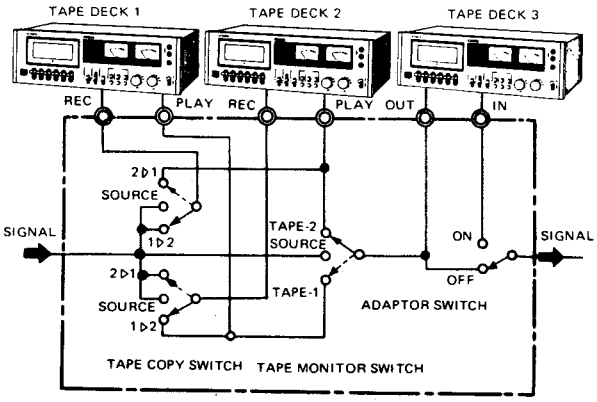


Fig. 6

CAUTIONS

1. ON THE CONNECTION OF TURNTABLE AND TAPE DECK

Be sure to use a thick, shielded cable with a low stray capacitance for this connection. If a parallel vinyl cord or a thin shielded cable is used, inductive hum may be produced and the high frequency characteristics will deteriorate considerably. Therefore, it is recommended that you use as thick and short a cable as possible.

2. PROTECTION CIRCUIT

Set the POWER switch to ON, the sound is heard within 3–6 sec., and the protection indicator lamp goes off. If the sound is not heard after 3–6 sec. or the protection circuit is actuated immediately, turn the POWER switch to OFF, and check whether the speakers are properly connected and whether the speaker terminal or speaker leads are short-circuited. Then eliminate the cause of trouble, set the POWER switch to ON again after waiting for 30 sec. with the POWER switch at OFF. If the set still does not work, contact the dealer from whom you purchased this unit or your nearest service station.

3. PROTECTIVE FUSE

If the protective fuse blows during the operation of this unit, unplug the power cord and replace the fuse (T3.15 A/250 V). In this case, however, the new fuse is not a fast-blowing fuse. Pay attention to this point.

Don't use thin wires temporarily. If the replaced fuse blows again, something may be wrong with the power supply circuitry. In this case contact the dealer from whom you purchased this unit or your nearest service station.

4. CAPACITY OF SPEAKER AND IMPEDANCE

The max. input capacity is indicated on the speaker systems: use suitable speaker systems. Although the speaker impedance suitable for the SR-904 is 4–16 ohms, pay attention to the following.

(1) Do not connect several speakers in parallel to any single channel.
(2) Do not use two or more speaker systems with an impedance of less than 8 ohms connected in parallel to the R or L channels.
(3) Avoid using speakers of less than 4 ohms.

5. AMPLIFIER HEAT LOSS

Since a large output power amplifier is used, the amplifier radiates heat. Although ventilation holes are provided in the upper part of the case and in the bottom plate to improve heat transmission, when it is placed in direct sunlight or when anything is placed directly on the amplifier, the ventilation may be deteriorated and faults may

occur. If the internal temperature rises, the transistors may be damaged. Take care not to block the ventilation holes.

6. USE OF CHEMICAL CLEANING CLOTH

When cleaning the cabinet, avoid using a chemical cleaning cloth as it may discolor the cabinet surface or peel off the coating.

Operation Precautions for the Dynaharmony Amplifier

This model incorporates a Dynaharmony amplifier which means that peak power outputs more than twice as high as the rated power output are reproduced without distortion. As a result, the sound is clear even under high-power output conditions and so, compared with normal amplifiers, the power level can be increased when listening. However, when the amplifier operates continuously for a prolonged period of time at a power output which is higher than the rating (75 watts), it functions in the same way as a Class B amplifier, and the protection circuit is sometimes actuated due to overdrive. A good idea is to use the amplifier with the peak indications of the meters at a level lower than the peak value at which the amplifier is capable of sound reproduction (150 watts with the SR-904).

The superiority and the principle of operation of the Dynaharmony amplifier are now outlined.

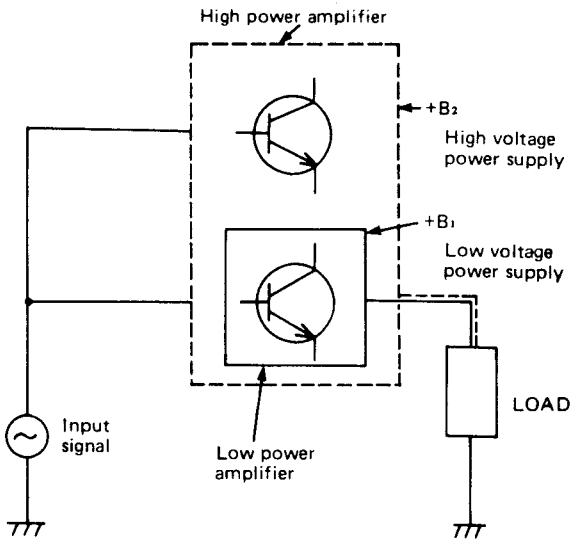
(1) Until the debut of the Dynaharmony amplifier

The level of a music source is constantly undergoing variations. The number of variations, however, is greatly reduced with a high-level signal input (for instance, less than -6 dB of the peak value), and they are less than 2% of the total time. Nevertheless, in order to reproduce high-level signals without distortion, the conventional method was to drive the transistors with a high voltage. This increased the size of the power transformer and heat sinks, raised the power consumption and downgraded the efficiency. With a view to improving these points, HITACHI developed the Dynaharmony amplifier which is really a combination of a high-power output and a low-power output amplifier. The amplifier is selected in accordance with the input signal level. This model also contains a Dynaharmony amplifier, and this provides for improved efficiency and also for a peak power output per channel of 150 watts.

(2) Principle of operation

As illustrated in the above figure, the power supply is divided into a high-voltage power supply ($+B_2$) and a low-voltage power supply ($+B_1$). The power transistors are also divided into two sets: one for high-power output and the other for low-power output applications. (With the conventional Class B amplifier, there was only one set of transistors serving for both high and low-power outputs.) When the input level of the signals is low, only the low-power output amplifier operates with the low-power output transistors and the low-voltage power supply ($+B_1$) supplies the current.

When, however, the input level of the signals reaches a certain value, both sets of transistors are actuated. This acts as the high-power output amplifier, and the current is supplied from the high-voltage power supply ($+B_2$). In other words, under normal input conditions, the low-power output amplifier alone operates, and the power consumption is kept down to a low level (since current flows from the low-voltage power supply only). All this means is that the power supply for the high-power output amplifier is increased more than that of conventional amplifiers with a low power consumption, and that high peak power outputs are reproduced without distortion.



SPECIFICATIONS

FM SECTION

Frequency range	88–108 MHz
Usable sensitivity	1.2 μV (DIN), 1.6 μV (IHF)
Signal-to-noise ratio	Mono: 74 dB Stereo: 68 dB
Harmonic distortion	
100 Hz	Mono: 0.2% Stereo: 0.3%
1 kHz	Mono: 0.15% Stereo: 0.25%
6 kHz	Mono: 0.25% Stereo: 0.3%
Frequency response	30 Hz–15 kHz (± 1 dB)
Image response ratio	85 dB
Spurious response ratio	100 dB
IF response ratio	100 dB
Alternate channel selectivity	80 dB
Capture ratio	1 dB
AM suppression	55 dB
Stereo separation	45 dB (1 kHz)
Sub-carrier suppression	65 dB
SCA rejection	65 dB
Muting threshold	14 μV
Antenna input	300 ohms balanced, 75 ohms unbalanced

AM SECTION

Frequency range	530–1,605 kHz
Sensitivity	300 μV/m (S/N 20 dB), 20 μV (IHF, ext. antenna)
Image rejection	70 dB
IF rejection	90 dB
Selectivity (IHF)	40 dB
Signal-to-noise ratio	50 dB
Antenna	Ferrite and separate terminal

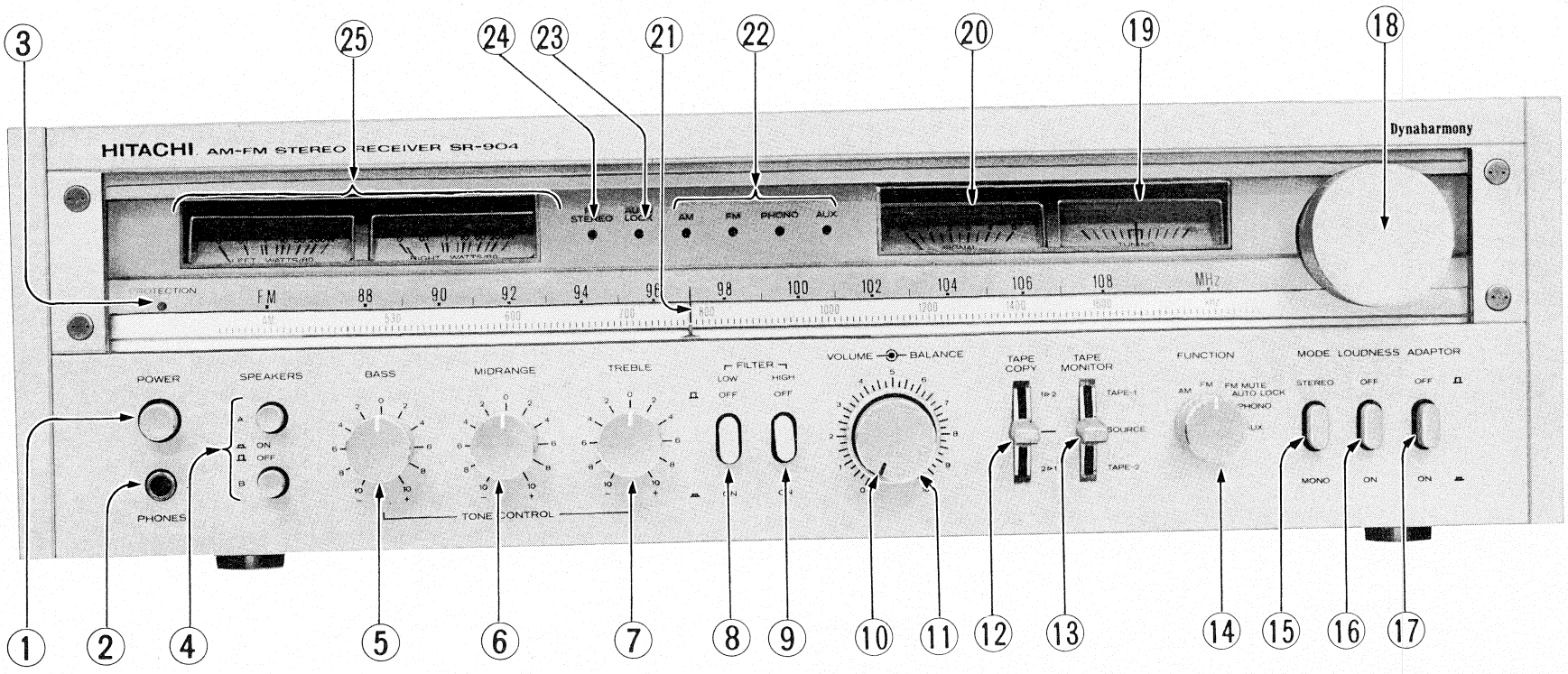
AUDIO SECTION

Output	
RMS power (Both channels driven)	75 W/ch + 75 W/ch (8 ohms, 20 Hz–20 kHz, T.H.D. 0.09%) 95 W/ch + 95 W/ch (8 ohms, 1 kHz, T.H.D. 0.1%) 100 W/ch + 100 W/ch (4 ohms, 1 kHz, T.H.D. 0.1%)
Music power IHF)	150 W/ch + 150 W/ch (8 ohms)
Power bandwidth	10 Hz–40 kHz
Frequency characteristics	8 Hz–40 kHz ($^{+0.5}_{-1.5}$ dB)
Harmonic distortion	
(at rated output)	0.1%
(at 1/2 rated output)	0.03%
Intermodulation distortion	
(at rated output)	0.1%
(at 1/2 rated ouput)	0.03%
Input sensitivity (at 80 W output, 1 kHz)	
PHONO	2.5 mV (47 k-ohms)
AUX	200 mV (50 k-ohms)
TAPE-1	200 mV (50 k-ohms)
TAPE-2	200 mV (50 k-ohms)
ADAPTOR	200 mV (50 k-ohms)
DIN	500 mV (80 k-ohms)
Max. Input level PHONO	220 mV (T.H.D. 0.1% at 1 kHz)
Output level	
TAPE OUT	200 mV (PHONO, AUX at rated input) 200 mV (FM 400 Hz, 30% dev. input: 1 mV) 150 mV (AM 400 Hz, 30% mod. input: 5 mV/m)
DIN OUT	50 mV (PHONO at rated input)
Signal-to-noise ratio (IHF, input shorted, A-network, rated power)	
PHONO	75 dB
AUX	87 dB
TAPE	87 dB
Damping factor	45 (1 kHz, 8 ohms)
Equalizer	RIAA ±0.5 dB
Bass control	±10 dB (100 Hz)
Midrange control	
Treble control (Volume control set at –30 dB position)	±10 dB (10 kHz)
Loudness control	+9 dB (100 Hz), +4 dB (10 kHz)
High filter	–8 dB at 10 kHz
Low filter	–8 dB at 50 Hz
Semi-conductors	4 ICs, 1 FET, 69 transistors, 95 diodes and 1 thyristor
Tape monitor	1, 2
Speaker switch	A, B, A+B
Power meters	2
Tuning meters	2 (Signal, Tuning)
Speaker terminal	One-touch terminal
FM MUTING/AUTO LOCK	Provided
Power supply	~220/240 V 50/60 Hz
Power consumption	615 W (4 ohms), 430 W (8 ohms)
Dimensions	490 (W) x 144 (H) x 400 (D) mm
Weight	13.5 kg (29.8 lbs.)

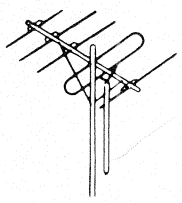
Specifications and designs may be changed without notice for improvement.

SR-904

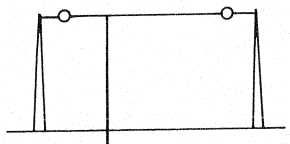
HITACHI

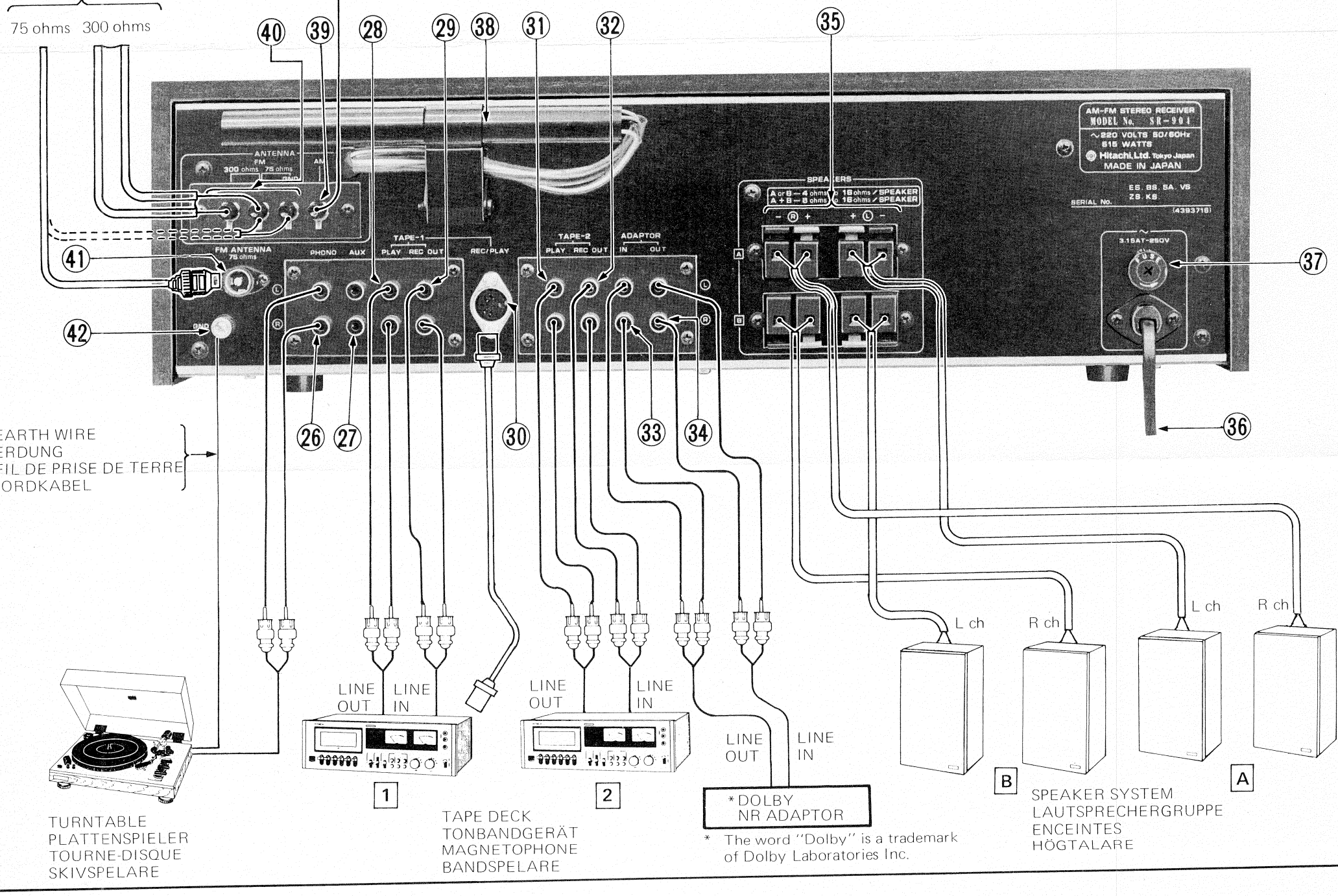


FM OUTDOOR ANTENNA
UKW-AUSSEN ANTENNE
ANTENNE FM EXTERIEURE
UTOMHUS FM-ANTENN



AM ANTENNA
MW-ANTENNE
ANTENNE AM
AM-ANTENN





EARTH WIRE
ERDUNG
FIL DE PRISE DE TERRE
JORDKABEL

TURNTABLE
PLATTENSPIELER
TOURNE-DISQUE
SKIVSPELARE

1

2

TAPE DECK
TONBANDGERÄT
MAGNETOPHONE
BANDSPELARE

LINE OUT
LINE IN

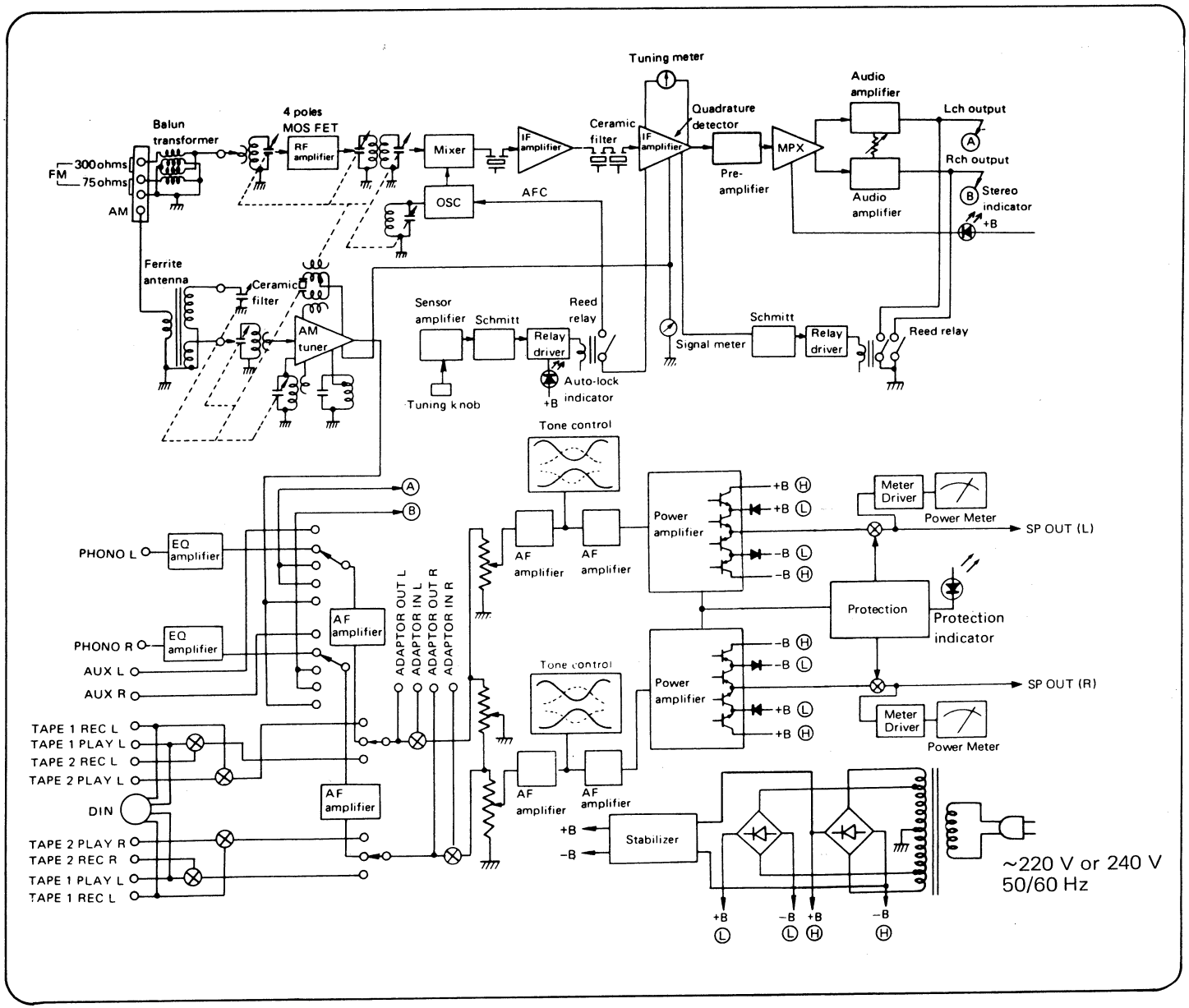
*DOLBY NR ADAPTOR

* The word "Dolby" is a trademark of Dolby Laboratories Inc.

B

A

SPEAKER SYSTEM
LAUTSPRECHERGRUPPE
ENCEINTES
HÖGTALARE



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